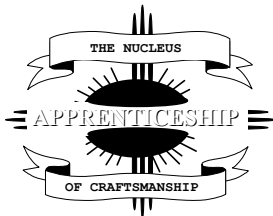




**STANDARDS OF APPRENTICESHIP**  
**adopted by**

**AGC, IUOE #701 ENGINEER TRAINING APPRENTICESHIP COMMITTEE**

<u>Skilled Occupational Objective(s):</u>	<u>(sponsor)</u>	<u>DOT</u>	<u>Term</u>
CONSTRUCTION EQUIPMENT OPERATOR		859.683-010	8000 HOURS
HEAVY DUTY REPAIRER		620.261-022	6000 HOURS
TECHNICAL ENGINEER		018.167-018	6000 HOURS



**APPROVED BY**  
**Washington State Apprenticeship and Training Council**  
**REGISTERED WITH**  
**Apprenticeship Section of Specialty Compliance Services Division**  
Washington State Department Labor and Industries  
Post Office Box 44530  
Olympia, Washington 98504-4530

**APPROVAL:**

APRIL 16, 1987

Initial Approval

By: LAFRANK NEWELL  
Chairman of Council

OCTOBER 19, 2001

Addendum Amended

By: PATRICK WOODS  
Secretary of Council

APRIL 19, 2002

Committee Amended

## **AGC, IUOE #701 ENGINEER TRAINING APPRENTICESHIP COMMITTEE**

NOTE: THE FOLLOWING ADDENDUM SHALL BE SPECIFIED TO THE GROUP JOINT APPRENTICESHIP AND TRAINING COMMITTEE AND ITS CRAFTS.

Labor and Management in Southwest Washington have adopted the apprenticeship system as a means of providing a continuing supply of skilled operating engineers for all branches of the industry.

The progress and growth of the building, heavy, highway, and engineering construction has created the need for a variety of sophisticated and costly equipment. The Apprenticeship Committee, composed of equal numbers of employer and employee representatives, working in cooperation with the Washington State Apprenticeship and Training Council, has developed these Standards.

### 1. GEOGRAPHICAL AREA COVERED:

The area covered by these Standards shall include the following counties or parts of counties in the State of Washington: Klickitat, Skamania, Clark, Cowlitz, Wahkiakum and that portion of Pacific County south of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean and the Pacific Ocean bordering the territorial jurisdiction of these Standards.

### 2. MINIMUM QUALIFICATIONS:

Age:	Not less than eighteen (18) years at time of scheduled pre-apprenticeship or pre-employment orientation training.
Education:	High school graduate or equivalent with documentation of same required at time of application.
Physical:	N/A
Testing:	N/A
Other:	Applicant will be expected to write and speak the English language.

### 3. CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:

#### A. Selection Procedures:

Selection shall be based on ranked order "on the basis of qualifications alone." This means that apprentices are chosen in an open and competitive process from those applicants meeting the minimum qualifications for the trade solely on the basis of their qualifications compared to those of other applicants.

Examples of objective standards by which comparative qualifications may be determined are: school diplomas/transcripts or their equivalents such as a GED; occupation specific essential physical requirements; previous work experience. Actual selection for an entry into apprenticeship will be on the basis of comparative qualifications alone.

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1. An application shall be made available to anyone who is interested regardless of any other consideration at the following location:  
Oregon/SW Washington IUOE Local 701 & AGC  
5001 Franklin Blvd.  
Eugene, OR 97403-2709  
Phone (541) 741-7292
2. Applications may be made available at other locations determined by the Apprenticeship Committee, which will be announced.
3. All application blanks shall carry a serial number so that they can be accounted for.
4. There shall be a book or form in which each line carries a number corresponding to the serial number of an application. Columns shall be provided to show the progress, by dates, and final disposition of each application.
5. Applications may be taken the year around as individuals express an interest or the sponsor may designate specified intervals for the acceptance of applications in accordance with Section 4.
6. Interviews shall be held periodically. All applications taken since the last series of interviews shall be processed to final disposition before any individual is accepted or rejected. Interviews shall be granted to all who meet the minimum qualifications.
7. Applicants not interviewed because they failed to meet any or all of the minimum qualifications will not be reconsidered until they correct any deficiencies (schooling, etc.) they may have and reapply.

### **B. Affirmative Action Plan:**

1. Participation in annual workshops, if available, designed to familiarize all concerned with the apprenticeship system and current opportunities.
2. Cooperate with school boards, community colleges and vocational schools to develop programs, which prepare students for entrance into apprenticeship.
3. Disseminate information, within shops or concerns, concerning equal opportunity policies of the program's sponsor(s).
4. Engage in OUTREACH or other such programs where available, designed to recruit, pre-qualify and place minorities and women (minority and non-

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minority) in apprenticeship. (If signatory to OUTREACH program, attach appropriate documents.)

5. To encourage establishment and use of pre-apprenticeship preparatory trade training and to provide that those who engage in such programs are given full and equal opportunity for admission into the apprenticeship program.
6. Use minority and women (minority and non-minority) journey-level workers and apprentices to promote the affirmative action program.
7. Grant credit for previous trade experience or trade-related courses for all applicants equally.
8. Engage in any other such action as stated above to ensure that recruitment, selection, employment and training of apprentices during apprenticeship shall be without discrimination because of race, color, religion, national origin, sex, or sexual orientation.
9. Direct referral into apprenticeship openings of Job Corps graduates successfully completing a specific trade pre-apprenticeship Job Corps program, without regard to present eligibility lists.

### 4. TERM OF APPRENTICESHIP:

The term of apprenticeship for the approved schedule of work experience for the specific classifications are:

Construction Equipment Operator	8000 hours of employment
Heavy Duty Repairer	6000 hours of employment
Technical Engineer	6000 hours of employment

### 5. PROBATIONARY PERIOD:

Apprentice Construction Equipment Operators shall be subject to a probationary period not to exceed the first 1600 hours of employment and one full term of Related and Supplemental Instruction (144 hours).

Apprentice Heavy Duty Repairers and Technical Engineer probation is 1200 hours of employment and one full term of Related and Supplemental Instruction (144 hours).

During this period, the apprenticeship agreement may be terminated by the Apprenticeship Committee or their designated authority or the apprentice.

### 6. RATIO OF APPRENTICES:

On any project on which the individual employer employs:

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1-4 Operating Engineers	=	1 Apprentice
5-9 Operating Engineers, exclusive of foreman	=	1 Apprentice required
10-19 Operating Engineers, exclusive of foreman	=	2 Apprentices required
20-29 Operating Engineers, exclusive of foreman	=	3 Apprentices required
Over 30 Operating Engineers, exclusive of foreman	=	1 Additional apprentice required for each 10 Operating Engineers.

### **7. WAGE PROGRESSION:**

Apprentices shall be paid on the following percentage basis in accordance with WAC 296-04-270 (2)(c):

The progressive wage rate to be paid the Construction Equipment Operator apprentice is:

1st period 0 to 2000 hours	80% of the journey-level wage
2nd period 2001 - 4000 hours	85% of the journey-level wage
3rd period 4001 - 6000 hours	90% of the journey-level wage
4th period 6001 - 8000 hours	95% of the journey-level wage

The progressive wage rate to be paid the Heavy Duty Repairer apprentice is:

1st period 0 to 2000 hours	80% of the journey-level wage
2nd period 2001 - 3000 hours	85% of the journey-level wage
3rd period 3001 - 4000 hours	90% of the journey-level wage
4th period 4001 - 6000 hours	95% of the journey-level wage

The progressive wage rate to be paid the Technical Engineer apprentice is:

1st period 0 to 2000 hours	80% of the journey-level wage
2nd period 2001 - 3000 hours	85% of the journey-level wage
3rd period 3001 - 4000 hours	90% of the journey-level wage
4th period 4001 - 6000 hours	95% of the journey-level wage



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Project equipment examinations). No more than one TSP and 500 hours OJT each will be credited toward completion for forklift and roller (including compactor and tamper) operations.

### **MAJOR II - CRANE OPERATION WORK PROCESSES**

Assistant to the Operator:

Hydro <50 Tons, Hydro>50 Tons

Conventional Crane, Lattice Boom Crane, Tower Crane, Whirley Crane

Drill Helper

Material Handling, Rigging, and Communications:

Forklift, Elevator, Wire Rope and Other Attachment for Lifting, Radio Communications, Hand Signals

Crane Operation:

Hydro <50 Tons, Hydro>50 Tons

Conventional Crane, Lattice Boom Crane, Boom Truck

Drill Operator

Dredging/Floating Crane Operations:

Deckhand Floating Clamshell Operator

Deck Engineer Floating Crane Operator

Asst. to the Deck Engineer Pile Driver

Fireman Welding & Repair/Maint.

Work Boat Operator Winch Operator

Diesel & Electric Engineer Fueling & Servicing

Total Major Hours 7000 - 7500

Core Experience Hours 500 - 1000

**TOTAL: 8000 hours**

An individual must have at least 1000 hours OJT in each work process, 432 hours of related training, and three (3) TSPs (Training Standards Project equipment examinations) to graduate. No more than 500 hours OJT credit each for forklift and elevator operations will be credited towards completion of the Major.

### **MAJOR III - ASPHALT/CONCRETE & PAVING WORK PROCESS**

Paving Operations (Concrete & Asphalt):

Roller, Screed Operator/Assistant to Operator (including Raker), Sweeper Paving Machine Operator, Bidwell Operator, Tiner Operator, Oiler

Crusher/Plant Operations:

Crusher Operator/Assistant to the Operator, Hot Plant

Operator/Assistant to the Operator, Concrete Plant

Operator/Assistant to the Operator, Oiler

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Miscellaneous Operations:

Loader, Hoe, Dozer, Grader

Loader with attachments, Haul Road Truck, Guardrail Punch,  
Concrete Pump(s)

Total Major Hours	7000 - 7500
Core Experience Hours	<u>500 - 1000</u>
<b>TOTAL:</b>	<b>8000 hours</b>

An individual must have at least 500 hours OJT in each category, at least 2000 hours OJT in two categories, 432 hours of related training, and three (3) TSPs (Training Standards Project equipment examinations).

ALL OF THE FOREGOING WORK EXPERIENCE AS HEREIN NOTED IS  
UNDERSTOOD TO MEAN AS IT PERTAINS TO THE TRADE HEREIN INVOLVED  
IN THESE STANDARDS.



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B.	<u>Heavy Duty Repairer:</u>	D.O.T. #620.261-O22	<u>Hours</u>
1.	Diesel and gasoline engine repair .....		2000
2.	Electrical Systems .....		500
3.	Cooling systems .....		250
4.	Gear train .....		2250
5.	Hydraulic systems .....		500
6.	Welding .....		250
7.	Small engine repair .....		<u>250</u>
<b>TOTAL HOURS:</b>			<b>6000</b>

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IN THESE STANDARDS.

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C.     Technical Engineer:             D.O.T. #018.167-018                             Hours

Apprentices shall receive the instruction and experience necessary to develop a practical and skilled individual in the theory and practice of their trade classification by using the following apprentice schedule of work experience as a guide:

1.	Use and care of hand tools (other than survey equipment), Truck Stocking, supplies.....	50
2.	Use and care of survey hand tools: Bob, Hand Level, Peanut, Torpedo, Tapes, Chalkline, Rod, Scale bubble, calculator.....	100
3.	Use and care of roads, chains, etc. Care and adjustment, temperature corrections, tension .....	200
4.	Communications: Hand signals, radios .....	50
5.	Marker Stakes: Symbols .....	250
6.	Slope Staking .....	250
7.	Leveling: Benchmarks, Turnpoints, Notes, Theory, Closure .....	350
8.	Radial Staking.....	600
9.	Hubs, Points and Monuments .....	100
10.	Use and care of instruments.....	1800
11.	GPS Operation .....	400
12.	Notekeeping and Sketches .....	300
13.	Computations and Coordinate Geometry.....	500
14.	Plans and Plan reading/interpretation, Site plan, civil, structural, architectural/mechanical .....	500
15.	Data collection and manipulation, Data Collectors, computer use .....	300
16.	Grade checking, Grades and Stakes Verification .....	250

**TOTAL HOURS:                             6000**

ALL OF THE FOREGOING WORK EXPERIENCE AS HEREIN NOTED IS  
UNDERSTOOD TO MEAN AS IT PERTAINS TO THE TRADE HEREIN INVOLVED  
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9. RELATED/SUPPLEMENTAL INSTRUCTION:

A. Each apprentice shall enroll in and attend classes in subjects related to this trade, as approved by the State Board for Community and Technical Colleges, for a minimum of 144 hours per year.

B. The methods of related/supplemental training shall consist of one or more of the following:

(X) Supervised field trips

(X) Approved training seminars

( ) A combination of home study and approved correspondence courses

(X) Technical college

(X) Community college

(X) Training trust

( ) Other (specify)

C. Hours 144 minimum

D. Satisfactory progress must be maintained in related training classes. (See section 10, Administrative/Disciplinary Procedures.)

E. Related/supplemental training shall consist of one or more of the following:

**1. Construction Equipment Operators:**

a. Year one (1) Core: 144 hours minimum

1. CPR/First Aid
2. General Occupation Orientation
3. Grades and Planes
4. Fuels and Lubricants
5. Preventative Maintenance
6. Equipment Instruction, Operation and Use
7. Occupation Specific Safety and Health
8. Diversity Training

b. Year Two (2): 144 hours minimum

1. Safety and Health
2. Equipment Specific Instruction on Equipment Use & Techniques of Operation

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3. Continuation of Instruction on Grades and Planes (as appropriate)
  - c. Year Three (3): 144 hours minimum
    1. Safety and Health
    2. Additional Equipment Instruction on Uses and Techniques
    3. Continuation of Instruction of Grades and Planes (as appropriate)
    4. Equipment Examination(s) (as appropriate)
  - d. Year Four (4): 144 hours minimum
    1. Safety and Health
    2. Equipment Instruction and Examination(s)
2. **Heavy Duty Repairers: Shall be a minimum of 144 hours per year in their three (3) year program**

CPR/First Aid, Trade Specific Safety and Health Orientation, Fuels and Lubricants, Preventive Maintenance, Introduction to Welding and Fabrication

  - a. Year One (1) - 144 hours minimum
    1. Occupational Safety and Health
    2. Gasoline and Diesel Engines (Introduction)
    3. Power Train Systems (Introduction)
    4. Hydraulic Systems (Introduction)
    5. Basic Electrical Systems
  - b. Year Two (2) - 144 hours minimum
    1. Occupational Safety and Health
    2. Gasoline and Diesel Engines (Continued)
    3. Power Train Systems (Continued)
    4. Advanced Hydraulics
    5. Welding and Fabrication
  - c. Year Three (3) - 144 hours minimum
    1. Occupational Safety and Health
    2. Gasoline and Diesel Engines (Continued)
    3. Advanced Hydraulics
    4. Advanced Electrical Systems
    5. Technical Data Research Techniques
3. **Technical Engineers. Shall be a minimum of 144 hours per year in their three (3) year program.**
  - a. Year One (1) - 144 Hours minimum
    1. CPR/First Aid

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2. Safety and Health in the industry
  3. General occupation orientation
  4. Equipment instruction (safety, operations & use)
  5. Grades and planes
  6. Math (algebra, geometry)
- b. Year Two (2) - 144 hours minimum
1. Safety and Health in the industry
  2. Plans and plan reading
  3. Upper level math (calculus, trigonometry)
  4. Computer Aided Design
  5. Equipment Instruction
  6. Professional conduct and Ethics of the Trade
- c. Year Three (3)
1. Safety and Health in the industry
  2. Plans and plan reading
  3. Upper level math (continued)
  4. Computer Aided Design
  5. Equipment Instruction (continued)
  6. Professional conduct and Ethics of the Trade

### 10. ADMINISTRATIVE/DISCIPLINARY PROCEDURES:

- A. To review every 1,000 hours the progress of each apprentice. All parties participating under the Standards may be asked for a report on each apprentice.
- B. Hiring of Apprentices: Employers desiring an apprentice shall place a job request with the Training Director's office. Applicant may be required by the employer to have a valid driver's license and dependable transportation as a condition of employment.
- C. In order to meet affirmative action guidelines for minorities and women, the Apprenticeship Committee has the authority to make selections based on affirmative action requirements.
- D. Periodic Evaluation and Record Form:
1. Each apprentice will be furnished with a 'Record Form', which must be signed or initialed at the end of each month by the timekeeper or foreman supervising the apprentice. The record must be submitted to the Training Director's office no later than the sixteenth (16th) of the following month, regardless if apprentice is working or not.

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2. The Apprenticeship Committee shall have authority to withhold advancement, suspend or cancel the Agreement for failure to comply, but any action must conform to the appeal requirements.
3. The late filing or failure to file, as well as falsification of records by the apprentice will result in disciplinary action by the Apprenticeship Committee.

### **E. Dispatch or Termination:**

1. No registered apprentice may refuse a dispatch or quit their job except for cause. Apprentices violating this clause are subject to disciplinary action or termination from the program.
2. Apprentices who have been terminated for cause twice (2) shall be subject to disciplinary action. A third (3) termination may result in immediate suspension until the Apprenticeship Committee determines what action to take.
3. Apprentices who refuse employment as offered will be subject to disciplinary action, i.e., placed at the bottom of the out-of-work list, unemployment certification will not be signed, work suspension or other disciplinary action. Any action taken by the Apprenticeship Committee must meet the prescribed appeal requirements. (WAC 296-04-295)

### **F. Rotation:**

1. Any apprentice who has completed the required number of hours in any one classification of work may be rotated from job to job by the Apprenticeship committee or their designated authority and be replaced by an apprentice who has not completed the number of hours required for their particular classification.
2. Apprentices who have completed maximum hours in a training classification shall notify the employer and the Apprenticeship Committee representatives.
3. In the event a rotation is necessary to achieve adequate on-the-job training, the apprentice will be rotated and a dispatch will indicate "Apprentice Rotation."

## **11. COMPOSITION OF COMMITTEE AND ALTERNATES:**

The Apprenticeship Committee shall be composed of eight (8) members, four (4) of whom shall represent the International Union of Operating Engineers, Local #701, and four (4) of whom shall represent the Oregon Columbia Chapter of the Associated General

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Contractors of America. A quorum consists of two (2) employer and two (2) union representatives. The Unit Vote System shall prevail.

Meetings of the Apprenticeship Committee shall be held three (3) times a year or more frequently, if necessary. The Chairman or Secretary of the Apprenticeship Committee or their designated authority shall have the authority to call and establish the date of the meetings. Any other two (2) members of the Apprenticeship Committee shall have the authority to request the Chairman to call a meeting of the Apprenticeship Committee.

### **The Employer Representatives Shall Be:**

Doug Overholser, Secretary  
8850 SE 76th Drive  
Portland, OR 97206

Ted Aadland  
2710 NE 78th Street  
Vancouver, WA 98665

Carl Coffman  
PO Box 687  
Oregon City, OR 97045

Rod Myrick  
2270 NW Rogers Circle  
Troutdale, OR 97060

Tim Nopp, Alternate  
PO Box 398  
Stayton, OR 97383

### **The Employee Representatives Shall Be:**

Mark Holliday, Chairman  
555 East First Street  
Gladstone, OR 97027

Nelda Wilson, Vice Chair  
555 East First Street  
Gladstone, OR 97027

Robert Hall  
555 East First Street  
Gladstone, OR 97027

Glenn Otis  
555 East First Street  
Gladstone, OR 97027

John Van Kommer, Alternate  
555 East First Street  
Gladstone, OR 97027

12. **SUBCOMMITTEE:** (None)

13. **TRAINING DIRECTOR/COORDINATOR:**

Quint Rahberger, Training Coordinator  
5001 Franklin Blvd.  
Eugene, OR 97403